Dicussion of "FinTech, Banking and Monetary Policy Transmission Evidence from the Deposit Market" by Yueteng Zhu and Jiajun Lu

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Yu'ebao

Figure 1: Prevelance of Yu'ebao after 2013

Motivation

- ▶ Rapid rise of big-tech companies!
- ▶ In 2013, Alipay introduced Yu'ebao MMF (high yield demand deposit).
- ▶ What is the effect of Yu'ebao on the traditional banking (funding, lending, MPT)?

Paper Overview

Motivation
- ▶ Rapid rise of big-tech companies!
- ▶ In 2013, Alipay introduced Yu'ebao MMF (high yield demand deposit).
- ▶ What is the effect of Yu'ebao on the traditional banking (funding, lending, MPT)?

Contribution
- ▶ First paper that analyzes the effect of Fintech through deposit market competition!.

Paper Overview

Result Preview

- Divide data to 2012-2014 and 2015-2018: deposit rate ceiling was removed in 2015.
- From 2012-2014 data
  - There are higher deposit outflows for banks that are more exposed to YEB.
  - No loan provision loss, but banks cut on liquid assets and financial investment.
- From 2015-2018 data
  - There are lower deposit outflows and higher loan growth for more exposed banks.
- **Why** reversal effect after 2015?
  - More exposed banks roll out innovative deposit products: higher deposit rate, SDs.
- MPT is mitigated for more exposed banks.
  - Deposit channel versus "catfish effect" channel.
  - Different before and after 2015.
  - Other channels are rejected: risk shifting channel, the funding substitution channel, and the lending competition channel.

Data and Identification Strategies

Key Variables

- ▶ YEB exposure: the number of active users on YEB divided by the local population.
- ▶ Branch network data to map city-level obs. to bank level obs.
- ▶ Balance sheet items from Call Report.
- ▶ Exogenous monetary shock (Chen el al., 2018).

Key Regressions

$$\Delta Y_{b,t_1-t_2} = \alpha + \beta log E_{b,t_1}^{YEB} + X'_{b,t_1}\gamma + \delta_b \tag{1}$$

$$\Delta Y_{bt} = \beta_0 + \beta_1 log E_{b,t-1}^{YEB} + \beta_2 log E_{b,t-1}^{YEB} * MP_t + X'_{b,t_1}\gamma + K_b + \mu_t + \epsilon_{bt} \tag{2}$$

- ▶ Instrument for $log E_{b,t-1}^{YEB}$:
    - ▶ Euclidian distance to Ant Group's headquarter in Hangzhou.
    - ▶ Penetration ratio of the Alipay platform. (Exogenous?)

Comments

- Why the "catfish effect" mechanism does not show up for traditional MMF?
    - Is YEB "deposit-like" product or "MMF-like" product?
    - Possible to look at R&D data for banks?
- Same regressions (Equation 1) for deposit rates (supply or demand shifts).
- Any explanation for why bond holding increases so much after deposit outflow from 2012 to 2014?
- Effects of YEB on overall lending and aggregate outcomes.
- Effects of YEB on MPT to deposit rates and quantities are insignificant in 2012-2014.
    - Deposit channel NOT strong?
    - Too little and noisy data points before 2015.
    - deposit rate ceiling before 2015.
- For periods 2015-2018, it is conservative to interpret it as Fintech crowds in bank intermediation. The overall trend of deposit growth is declining during this period.
- Can results in sub-sample 2012-2014 versus 2015-2018 be interpreted as short term effect versus long term effect? Is it better to use $logE_{b,2015}^{YEB} - logE_{b,2013}^{YEB}$?

On Theory

A Sketch of an Extension to Drechsler et al. (2017)

Household' utility:

$$u(W_0) = \max \left(W^{\frac{\rho-1}{\rho}} + \lambda I(M, D, Y)^{\frac{\rho-1}{\rho}} \right)^{\frac{\rho}{\rho-1}}$$

where

$$I(M, D, Y) = (M^{\frac{\epsilon-1}{\epsilon}} + \delta_D D^{\frac{\epsilon-1}{\epsilon}} + \delta_Y Y^{\frac{\epsilon-1}{\epsilon}})^{\frac{\epsilon}{\epsilon-1}}$$

Budget constraint follows:

$$W = W_0(1+f) - Mf - D(f - r^D) - Y(f - r^Y) - \Phi(Y)$$

▶ During 2012-2014, r^D is fixed.

▶ During 2015-2018, N banks compete in the deposit market $\Rightarrow$ endogeous r^D.

   ▶ Simple way to model bank competition: $D = (\frac{1}{N} \sum_{i=1}^{N} D_i^{\frac{\eta-1}{\eta}})^{\frac{\eta}{\eta-1}}$

Other Possibilities

▶ Cournot competition: Van Hoose et al. (2010).

▶ Structural model: Wang et al. (2022)

▶ Nash bargaining: Lagos and Zhang (2023).

Conclusion

- Hot topic!
- Rich and rigorous evidence!
- A very nice paper! I enjoyed reading it and learned a lot!

Good luck with publication.